

OLYMPIC COAST
NATIONAL MARINE SANCTUARY
Meeting Minutes

OCNMS Advisory Council Meeting
March 21, 2014

Washington State Department of Ecology
Lacey, WA

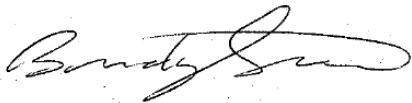
Olympic Coast National Marine Sanctuary
NOAA, Office of National Marine Sanctuaries
115 E. Railroad Avenue, Suite 301
Port Angeles, WA 98362-2925

Reviewed by OCNMS Superintendent:



Carol Bernthal, Superintendent

Approved by AC Chair:



Brady Scott, Chair

Advisory Council (AC) Members/Alternates in Attendance: Brady Scott (WDNR), Heather Reed (WDFW), Rebecca Post (WDOE), Jennifer Brown-Scott (USFWS), Bob Boekelheide (Citizen-at-Large), Jan Newton (Research), Tom Mumford (Research), Lee Whitford (Education), Eric Delvin (Conservation), John Stadler (NMFS), Joel Kawahara (Commercial Fishing), John Veentjer (Marine Industry), Rich Osborne (MRC), Alan Rammer (MRC), Katrina Lassiter (WDNR), Jennifer Hennessey (WDOE), Linda Rotmark (Tourism/ Economic Development), Jennifer Hagen (Quileute Tribe), Joe Schumacker (Quinault Indian Nation), CDR Scott Stewart (USCG), Frank Gordon (Grays Harbor Co. Commissioner), Mike Doherty (Clallam Co. Commissioner), Phil Johnson (Jefferson Co. Commissioner)

Presenters and Members of the Public in Attendance: Libby Whiting (WDNR), Bridget Trosin (WA Sea Grant), Lalena Amiotte (WDNR), Mindi Sheer (NOAA), Parker MacCready (University of Washington), Cheryl Chen (Point 97), Casey Dennehy (Surfrider), Susan Lovelace (Hollings Marine Laboratory), Noah McCord (Capital High School)

NOAA/OCNMS Staff in Attendance: Carol Bernthal, George Galasso, Karlyn Langjahr (OCNMS) and Dayna Matthews (NOAA)

Chair Brady Scott called meeting to order and reviewed the goals and purpose of the Advisory Council per its Charter. Rebecca Post welcomed everyone to Washington State Department of Ecology (WDOE) on behalf of Director Maia Bellon, and emphasized the power of such a diverse group of council members representing varied interests working together toward a common goal.

Adopt Agenda – The draft agenda was adopted without changes ***with full AC member consensus.***

Internal Affairs:

Approval of January 2014 Meeting Minutes – Alan Rammer pointed out two grammatical corrections. ***There was full AC member consensus to approve January meeting minutes after incorporating these changes.***

Follow-up on January 2014 AC Resolution Letter – Carol Bernthal announced that she forwarded the Advisory Council's recommendation letter to continue supporting OCNMS's oceanographic monitoring program to ONMS Director, Dan Basta, and West Coast Regional Director, Bill Douros. Both acknowledged receipt of the resolution letter and agreed that the programs were of importance to the sanctuary. In the subsequent budget, additional funds were allocated broadly to OCNMS, which had listed the moorings program as one of its top unfunded programs, so Carol recognized the letter's positive impact. Although the funding will not cover the full amount needed, it will be sufficient to continue deploying mooring buoys and

to hire a marine technician (replacing Rick Fletcher who is retiring), and maintain required annual calibrations. OCNMS will seek further support for the remaining needs.

Research, Citizen-at-Large and Marine Resources Committee Seats – Carol Bernthal shared that AC members Bob Boekelheide and Roy Morris have been reappointed by the AC Executive Committee to serve in Citizen-at-Large seats (primary and alternate, respectively). AC members Jan Newton and Tom Mumford were also reappointed in their positions of Research (primary and alternate, respectively). Both Citizen-at-Large and Research seat terms end on Dec. 31, 2013. Member will continue to serve for another three year term. The Marine Resources Committee primary seat vacancy was filled by Rich Osborne of ONRC. Rich is very familiar with the Advisory Council and has been a friend of OCNMS and the Marine Resources Committees, which he coordinated for its first five years.

Recruitment of AC Vice-Chair – Brady noted that Vice-Chair Ellen Matheny recently resigned from the Advisory Council due to accepting a new job in Olympia. A formal recruitment process for the Education primary seat vacancy will begin on May 15 via a Federal Register Notice announcement with an application deadline of June 30. The Education primary would then be seated at the September meeting. Brady opened the floor for discussion or nomination of Vice-Chair candidates. Lee Whitford expressed interest in helping, stating her intention to apply for the Education primary seat. Brady noted that per the AC Charter, AC Executive Committee officers must be primary AC representatives. He did, however, welcome Lee's participation as an interim Executive Committee member knowing that she is currently Acting Education primary and that it will take time to recruit. Eric Delvin wanted to consider the opportunity and follow up with the AC Executive Committee. Anyone interested in serving on the AC Executive Committee or interested in learning more about officer commitments can contact Carol or Karlyn.

Science Working Group – Rebecca Post, Co-Chair of the Science Working Group (SWG), updated the council on the SWG's recent conference call meeting held on March 13. The group recruited Greg Williams of Northwest Fisheries Science Center, who has worked with ecosystem indicators with Monterey Bay National Marine Sanctuary. They have been focusing on the criteria of OCNMS's 2008 Condition Report and have sub-divided the SWG up into smaller teams to tackle the human impacts on water quality, habitats, living resources, and maritime and archeological resources). Their next conference call is scheduled for mid-April and they have requested incorporating a presentation at the next AC meeting in May.

Youth Participation Program – Brady provided an update on a meeting held between Youth Seat Subcommittee members and the AC Executive Committee in February to discuss strategies to better implement the youth participation program. They planned for recruiting student participants for upcoming meetings and created a survey for youth who attend and present at AC meetings to receive youth feedback. Overall the process to identify student participants for AC meetings has been challenging, but they will continue to keep engaging education contacts. The group decided that it will not be feasible to have youth participating for the July meeting

due to summer schedules but will work towards youth representation at the September and November meetings before evaluating the year-long trial period. Ideally the group aims for students to learn more about the sanctuary and sanctuary issues as well as to provide youth perspective at meetings. Phil Johnson suggested inviting the group of Students for Sustainability of Port Townsend who are working on climate change mitigation. Jennifer Hennessey suggested the Pacific Education Institute, which received a B-WET grant to work on the coast.

National Business Advisory Council – Brady shared that the Sanctuary System Business Advisory Council (BAC) held their first meeting in January. The National Business Advisory council is the first ONMS-wide advisory council and was formed to better engage corporate partners. Confirmed members include representatives from TripAdvisor, Royal Caribbean, Johnson Outdoors, Maersk, Hess, Disney, National Geographic and the Rockefeller Foundation. During the initial meeting, members learned about the sanctuary system and provided feedback on how ONMS can engage with the corporate sector and how the council should operate in the future. ONMS hopes to finalize recruitment soon to complete the BAC's roster and plans to organize four meetings each year.

Information Items:

Tourism Working Group – Alan Rammer reported on behalf of the Tourism Working Group. The TWG has met twice since the January AC meeting and shared results of a survey they sent out to tourism related contacts on the Olympic Peninsula. Members proposed strategies and ideas for OCNMS to implement in order to achieve the goals of Visitor Services and ONMS's *Campaign of Engagement*. Some of the feedback they received included an interest from businesses and related groups (Chambers of Commerce, etc.) in knowing more about OCNMS and what the sanctuary does, obtaining rack cards/hand-outs, having OCNMS staff presence via presentations and participating in events, increased visibility electronically and digitally, development of voluntourism/stewardship tourism, and more. TWG members will rank the proposed strategies, keeping in mind the limited financial and staff resources. A total of twenty-two strategies in 3 categories were proposed.

Mike Doherty suggested that OCNMS or partner apply for a small grant funded by county lodging taxes to work on product development to further tourism in the area. He also mentioned that the Governor recently created by Executive Order an Outdoor Recreation Task Force, which the sanctuary could reach out to. Mike mentioned potential collaboration with kiosk development at Laird's Corner to celebrate the Elwha dam removal and tribal cultures. Joe Schumacker mentioned possibilities with State Parks and other coastal beaches in the southern reaches of the sanctuary. The TWG group will meet again in early April and plans to present final recommendations to the council at the May meeting.

Preliminary Results of UW Oceanography Research on Outer Coast – Jan Newton introduced the AC to an overview of progress on science recommendations of the Washington State Blue Ribbon Panel (BRP) on Ocean Acidification (OA) to provide context to Dr. Parker MacCready's presentation. She referenced two relevant reports driving OA efforts (both of which can be accessed WDOE's webpage <http://www.ecy.wa.gov/water/marine/oceanacidification.html>)::

- 1) Ocean Acidification: From Knowledge to Action which contain all of the recommendations, strategies and actions put forth by the BRP
- 2) Scientific Summary of Ocean Acidification in Washington State Marine Waters, containing the scientific background

The Washington OA Center was funded to implement five science actions recommended by the BRP and selected by the Legislature, for which the OA Center has made four awards and is planning implementation of the fifth.

- 1) Strategy 6.2 - *Increase the capacity of resource managers and the shellfish industry to adapt to OA*. Two of these Key Early Actions (KEA) received funding from the State Legislature contracted to the Pacific Coast Shellfish Growers Association:
 - Action 6.2.1 "Ensure continued water quality monitoring at six existing shellfish hatcheries and rearing areas to enable real-time management of hatcheries under changing pH conditions" and
 - Action 6.2.3 "Investigate and develop commercial-scale water treatment methods or hatchery designs to protect larvae from corrosive seawater"
- 2) Strategy 7.1 - *Understand the status and trends of OA in Washington's marine waters*. The University of Washington's OA Center is working on a KEA Action 7.1.1: "establish an expanded and sustained ocean acidification monitoring network to measure trends in local ocean acidification conditions and related biological responses".
- 3) Strategy 7.3 – *Characterize biological responses of local species to OA an associated stressors*. To address Action 7.3.2 "conduct laboratory studies to assess the direct effects of OA, alone and in combination with other stressors, on local species and ecosystems" a collaborative research project between UW, WWU and NOAA was selected.
- 4) Strategy 7.4 – *Build capacity for short-term forecasting and long-term prediction of OA*. A group from the University of Washington's Coastal Modeling Group was awarded funds to develop models and complete the forecast model for the outer coast by the end of this year.

Dr. Parker MacCready presented UW's Coastal Modeling Group work on the above-mentioned project. The oceanography of the outer coast can be characterized by two main patterns, an upwelling resulting in colder, nutrient-rich and saline waters or the opposite characteristics during downwelling events. Annual spatial variations are observed in

dissolved oxygen patterns on the shelf, with particularly low levels (hypoxic) in the late summer. Realistic numerical simulations of the system were used to generate results, similar to weather forecasting. Parker showed a video of results from surface salinity, surface temperature, surface chlorophyll, and bottom oxygen over the course of one year (2005). Models are used to help predict the biological, chemical and physical characteristics along the coast and a significant amount of effort is also used to validate the models. Overall, the Coastal Modeling Group found OCNMS data to be significantly valuable for model validation. The ability to generate time series (for dissolved oxygen) is particularly helpful due to the natural spikes. Sanctuary mooring buoys in shallow depths are a great complement to other moorings in deeper sites (the NANOOS-IOOS buoys Cha'ba and NEMO at 100 m on the shelf and an Ocean Observatories Initiative mooring to be placed). Accessibility of OCNMS data and format on the website is very important, although the data posted currently only goes through 2011. Future modeling plans include converting the modeling system to make daily forecasts, adding carbon chemistry to address ocean acidification, finalize the coastal model this year and work on the model for Puget Sound next year. Jan reiterated the value in linking OCNMS data to other regional and international sites.

Update on Groundfish EFH Proposals – John Stadler, Essential Fish Habitat (EFH) Coordinator of NOAA-NMFS, updated the council on the Groundfish EFH proposals for the Pacific Coast. Under the Magnuson-Stevens Fishery Conservation and Management Act (MSA) of 1976 the Fisheries Management Councils are required to identify Essential Fish Habitat for any of the species they manage. In 2005 the Pacific Fisheries Management Council reviewed EFH for all 93 Pacific Groundfish species, waters and benthos important to these fish for spawning, breeding, feeding, or growth to maturity. The PFMC is required to undergo review EFH designations every five years.

In Phase 1 all new information was gathered including seafloor mapping, substrate identification, and species habitat needs. The Northwest Fisheries Science Center (NWFSC) produced an analysis of new information collected since 2006. They received eight proposals after issuing a Request for Proposals (RFP) in 2013, many of which dealt with closing off areas to bottom-trawling or bottom contact gear to avoid deep sea corals. The review committee submitted their comments on the proposal to the PFMC before their meeting in March. Simultaneously the NWFSC has been evaluating if EFH is working, a very challenging question to answer. At the March PFMC meeting they decided to have the NWFSC generate short-term analyses and report back to the PFMC by September. At that point they will hopefully give direction on how to develop alternatives for consideration in the NEPA process. Joel Kawahara, a member of the review committee, added that the proposal from Olympic Coast National

Marine Sanctuary and WA Department of Fish and Wildlife (WDFW) included many fishing-coral interactions, of which there is still some uncertainty on a West Coast level. There is a need for more understanding of habitat and fishing gear interactions. Carol informed the council that OCNMS and WDFW retracted OCNMS's proposal after further discussions with the tribes to allow for more comprehensive discussion within the Intergovernmental Policy Council (IPC) in moving forward. Joe Schumacker added that they are hoping to bring in additional expertise during this process and use this as a showpiece for how habitats can be assessed along the coast, particularly in supporting associated fish populations.

Lunch Break

Overview of Marine Spatial Planning (MSP) Process – Jennifer Hennessey presented an overview of the state's Marine Spatial Planning (MSP) process and status. Marine Spatial Planning efforts are being undertaken due to increasing pressures and demands on existing uses of the ocean, proposed new uses, and conflicts among uses. \$3.7 million was allocated to help implement MSP efforts, including addressing location of potential new uses (e.g. renewable energy, aquaculture, dredging, etc.). This non-regulatory plan's goals include protecting existing uses, protecting cultural uses and resources, preserving the environment, integrating decision-making and providing new economic opportunities. The study area includes state and federal waters and estuaries up to 700 fathoms offshore. In the overall timeline, they are currently in stage 2, "understanding impacts", which involves: 1) sector analyses to understand the requirement(s) of each use and predict future uses and needs; 2) ecosystem assessments to identify outside impacts, indicators and evaluate the status and risks; and 3) conflict assessment to identify conflicts and compatibilities. They expect to finalize the plan sometime in 2015-16. From the process, they hope to gain better baseline information and identification of ecosystem indicators, analyses to support proactive decision-making, recommendations for new uses, and implementation frameworks across the different agencies. To access planning documents, project reports, RFPs and other information, visit www.msp.wa.gov. Jennifer highlighted a mapping application which displays GIS data, using examples of the commercial groundfish fishery and the recreational halibut fishery using data from WDFW. Some of the current data and projects include: ecosystem assessment and indicators; sector analyses, marine mammal and seabird data and maps; seafloor mapping; recreational data; a coast-wide economic assessment; and important ecological area analysis. They are also looking into shipping data to create a visual resource inventory. She noted that there are many shared priorities and opportunities between the state planning process and sanctuary management objectives and plans. WDOE has been a strong sanctuary partner for many years, including assisting with the establishment of OCNMS, and continues to work together on various efforts. Jennifer presented a WA State MSP Crosswalk handout that

she and George Galasso produced to display data and projects of mutual interest, including Coastal Economic Analysis feedback, seafloor mapping, and ecosystem indicators. They hope to receive input on other existing data sources, and data gaps/projects. Additionally, they are seeking contacts to participate on the science advisory panel coordinated by Washington SeaGrant as a liaison between key players of the MSP process and the general public.

Recreational Use Study for MSP in Washington – Casey Dennehy of Surfrider introduced the topic of recreation as an important component of Marine Spatial Planning (MSP). There is limited information apart from economic data more loosely tied to tourism. Surfrider and Ecotrust have conducted recreational use for MSP studies in Oregon and the Mid-Atlantic, which will now be expanded to the Pacific Coast of WA. Surfrider’s role has included engagement and outreach with key stakeholders, with Point 97 providing the technical expertise. Cheryl Chen of Point 97, the for-profit branch of Ecotrust, outlined the goals of the ocean and coastal recreation study: 1) To establish a spatial baseline of coastal recreation use patterns, both intensity of use and economic value; 2) To characterize coastal recreation, demographics, participation rates for specific activities and trip expenditure profiles; and 3) To engage coastal recreation stakeholders in state MSP efforts. Project methods include an online standing panel survey, a probability-based sample weighted by demographic and geographic characteristics targeting 6,000 Washington residents. The other opt-in online survey will be used to capture data on specific marine-related activities practiced by a smaller portion of the population, reached through targeted solicitation of such user groups. Expected project outputs include an estimate of total population size and demographic of coastal recreational users for overall and specific activities. They will also create a series of maps to show spatial patterns of use for overall and specific coastal recreational locations, and economic value attributed to overall and specific coastal recreational locations. From this data they will be able to estimate the total coastal visitation and expenditures. The focus of their recreational uses is on non-consumptive uses, with the exception of razor clamming. Cheryl demonstrated how the information can be represented using Google maps. She also showed the opt-in survey tool, which aims to collect as much spatial data as possible from targeted outreach to specific recreational activity users. The tools depict stakeholder activity “hot-spots” and can be used for targeted outreach efforts.

Social Valuation of Marine Ecosystem Services – Dr. Susan Lovelace of NOAA’s National Centers for Coastal Ocean Sciences’ Hollings Marine Laboratory presented on social values of marine ecosystem services. Humans often make decisions on natural resources based on how we feel or think about something, yet it is very difficult to measure social values, asking how much people are willing to pay for access to or a coastal service, or estimating the cost of its replacement. Social scientists can also try to question how much someone’s life would change

without the coastal service or measure changes in health. Managers will use social value data to help make decisions about public access, distribute openings and closures, assess coastal decisions, make permitting decisions, and learn about places most valued by stakeholders and user groups. Susan shared project work that she has been leading with Jarrod Loerzel on “Social Value Assessments in Protect Areas” including a completed study in a South Carolina estuary and a study underway in a Texas Estuary, leveraging an adapted “SolVES” (Social Values for Ecosystem Services) model developed by the USGS. They are planning on bringing this work to Olympic Coast National Marine Sanctuary, their first project in a national marine sanctuary.

An initial list of values for OCNMS was developed from preliminary discussions and conversations with staff, and includes: aesthetic, biodiversity, economic, legacy, learning, in and of itself, human needs, recreation, spiritual, therapeutic, wilderness, inspiration, socializing, and Treaty Rights. Proposed survey methods include a random sampling of residents of the three surrounding counties, intercept survey of users, and a snowball sample of key stakeholders. Resulting products from these surveys yield maps showing intensity of values. They aim to incorporate more information about relationships between valued locations and environmental characteristics (including habitat and public information) and develop an analysis of management-related responses to questions. Susan shared examples of questions asked on study surveys, such as opinions on changes in conditions of the area, their use of the area and what role it plays in their family/community’s lives, and basic demographic questions.

Susan showed examples of value intensity maps that resulted from their research in a South Carolina Estuary. The work they have done and seen so far using this model resulted in aesthetics, biodiversity and wilderness as the top perceived values. Moving forward with the process of developing a “Social Values of Marine Ecosystem Services” study for Olympic Coast, the survey will need to be refined to select site-appropriate questions. They would also work with OCNMS and partners to develop maps for the survey and analysis and set target locations and position people for data collection. Once analyses are completed, they would determine which specific products would be most relevant to OCNMS for its decision-making. Advisory Council members discussed sampling methods and management issues to help provide input for the potential study. Bob Leeworthy, Chief Social Scientist for ONMS, mentioned a potential third component to this study which would need funding, to support non-market economic valuation and how non-market changes with natural resource attributes.

Youth Participation on WDFW Youth Advisory Council Process – Capital High School senior Noah McCord shared his experience with WDWF’s Youth Outdoors Initiative developing a youth advisory council. WDFW began the process through scoping to determine how many interested students around the state would be interested in attending a one week workshop in October to

provide input. Department staff worked directly with students to lobby for getting youth outside more. WDFW staff participated in events and went into the field to recruit 25 students who applied to participate as part of a staff and stakeholder review. From this group, 7 youth were selected from around the state and met in Olympia in October to define expectation. They received assistance from Office of Superintendent of Public Instruction (OSPI), which has experience administering the WA State Youth Legislative Advisory Council, the first state in the US to have a council of that nature.

During the first phase the students discussed and identified barriers to getting youth outside: lack of knowledge of recreational opportunities, fear of negative stigmas, lack of parental support and financial, and distance- or time-related limitations. In phase two they made recommendations to WDFW on communication channels, stigma targeting, enhancement of environmental education programs and enhancement of peer-to-peer communication. Students recommended that WDFW form a panel of nine members between the ages of 14-18 from a diverse socioeconomic, geographic, and recreational interest range. They believed that the formation of a youth advisory council would build better connections to communities, schools and stakeholders; build partnerships with youth advocates for conservation, citizen science and recreation; provide insights into youth perspectives; and develop leadership by being the first among WA agencies to bring youth participation and input into its policy making. Noah described his role compiling a consensus of the group's overall opinions to produce a recommendation paper and submit to WDFW's Office of the Director. He has participated alongside WDFW staff in lobbying and support and believes the youth advisory council will be in place within the year. None of their youth applicants came from the Olympic Peninsula or further west than Olympia.

Superintendent's Report – Carol highlighted sanctuary updates from the past two months and referred council members to the Office Report for further information and details:

1. OCNMS has been awarded two interactive kiosks from PAC funding. Location for these two kiosks is to be determined, but OCNMS is interested in placing one of the kiosks at the southern end of the sanctuary near or along the coast. A third kiosk from a different funding source was awarded to the Pacific Science Center, sanctuary staff will assist in providing content.
2. CoastSavers submitted a proposal for a traveling marine debris exhibit, which was funded. Jon Schmidt of CoastSavers is working on that project with input from OCNMS staff. The exhibit will consist of 6-7 informational panels on marine debris and an art sculpture created from marine debris.

3. The Intergovernmental Policy Council (IPC) met in February to discuss their annual priorities and funding. They defined their goals and priorities, including ocean literacy, habitat mapping and characterizing critical habitat.
4. A recent celebration was held for the 40th anniversary of the Boldt Decision hosted by the Squaxin Island Tribe with over 700 people in attendance.
5. The Senior Consul from the Japanese Government met with staff from OCNMS, Olympic National Park, United States Fish and Wildlife Service, CoastSavers and Washington SeaGrant who worked together on Japanese tsunami marine debris efforts. They discussed findings on the outer coast and thanked the Japan government for the funding and proactive efforts to support responding to marine debris from the March 2011 tsunami.
6. OCNMS delivered two teacher workshops on ocean acidification in Clallam Bay and Grays Harbor, targeting middle and high school teachers.
7. Two journal articles were recently published concerning deep-sea specimens collected in OCNMS during a 2008 survey. A new species of sponge was identified and new information was gathered about red tree corals.
8. George provided an update on crushed vehicles found in sanctuary waters. He is working with General Counsel Environmental Section and General Counsel Natural Resources of NOAA's Office of Law Enforcement on the case. OCNMS is also consulting with Makah tribe on the case, which is still under investigation.
9. OCNMS is still finalizing the 2014 field season and will be losing Geographer Nancy Wright and Oceanographer/Skipper Rick Fletcher to retirement. Moorings will be deployed and intertidal monitoring will continue to take place.
10. On Sat., April 5 OCNMS will sponsor a COASST training at the Clallam County Courthouse in Port Angeles from 11:00am to 5:00pm.
11. OCNMS is a co-sponsor of an orca whale presentation series by international orca expert Erich Hoyt entitled, "Adventures with Orcas in the North Pacific, from Stubbs to Iceberg." The event in Port Angeles will be held at Red Lion Hotel on May 8 at 7pm.

The Office Report for March 2014 can be found at:

http://olympiccoast.noaa.gov/involved/sac/officereport_march_2014.pdf.

Public Comment – There were no public comments.

Member Reports & Future Agenda Topics

- Eric Delvin shared that TNC was unsuccessful in their grant application through Washington Coast Restoration Initiative due to budget decisions by State Legislature.
- Jennifer Hagen, announced that the Quileute Tribe launched their forage fish project work and her technicians began setting up moorings.

- Jan Newton met with Justin Ellis of OCNMS along with other partners to discuss the plan for the upcoming oceanographic monitoring field season. Jan was recently on Capitol Hill and the President's budget has now been released. The budget looks positive for NOAA's Ocean Acidification Program but was disappointed that IOOS was level-funded. Letters of support will be circulating, so if anyone is able to lobby or interested in signing, contact Jan.
- CDR Scott Stewart is retiring from US Coast Guard and this will be his last meeting. He thanked the council for the partnership and learning experience and announced that his replacement will arrive in July.
- Jennifer Brown-Scott and USFWS are continuing to work out logistics for use of Unmanned Aircraft Systems (UAS) for seabird monitoring on the coast to avoid the safety hazards and disturbance that helicopters or fixed wing aircraft present to seabirds. USFWS has been working with US Coast Guard in Port Angeles on a mission to remove marine debris from Destruction Island, but was unsuccessful due to weather events. The debris removal attempts have been postponed until after the birds leave in the fall.
- Rich Osborne announced that RainFest will take place in Forks in conjunction with the annual WA Coastal Cleanup on April 19 at Forks High School, featuring a River and Oceans film festival. A RFP will be released in May for a new grant round to support projects between \$5,000-\$10,000 in natural resource management, which the sanctuary would qualify for. ONRC has been working to arrange local scientists visiting and presenting to high school classrooms to expose students to career opportunities in natural resource management and related fields.
- Alan Rammer shared that the National Ocean Science Bowl will take place in Seattle for the first time at the University of Washington on May 1-4. They are still in need of volunteers for all four days of the event in multiple capacities. If interested, visit nosb.org to contact event coordinators.
- John Veentjer reiterated that the Vessel Traffic Risk Assessment report presented to the SAC last year by Professor Rene van Dorp can be accessed at www.pshsc.org. The report identifies tools to use as they anticipate vessel increase in the region. Currently there is a decrease in vessel traffic compared to 2008-09, which could rise again pending proposed projects.
- Joe Schumacker mentioned that Quinault Indian Nation will be starting a hypoxia monitoring research project to determine potential stressors in the razor clam population on Point Grenville beach. They have found that razor clams on beaches north of Point Grenville, including Kalaloch, have not recovered since the mid-2000s. They will also launch efforts in Marine Spatial Planning through NOAA funding for at least one year.
- Heather Reed shared that the MRCs' coastal cleanup on Long Beach uncovered a significant amount of debris associated with the crab industry. She immediately spoke to several crab advisors and will more formally meet with the crab fishing industry. Some of the members have committed to reporting to their formal affiliations, including Columbia River Crab

Fisherman's Association and Washington Crab Fisherman's Association. They are working on ways to trouble-shoot this problem.

- Jennifer Hennessey reported that the Washington Coastal Marine Advisory Council (WCMAC) will meet on April 23 in Aberdeen at the Port of Grays Harbor. WCMAC meeting information can be found at www.ecy.wa.gov/programs/sea/ocean/advisorycouncil.html. She also mentioned that the national budget is struggling in some areas, including the Regional Ocean Partnership which has been zeroed out.
- Bob Boekelheide reported that the Olympic Peninsula Audubon Society is putting on the Olympic BirdFest during the first week of April. A "shakedown cruise" will take place in Neah Bay on March 29 with another cruise on April 3 as part of BirdFest. The Makah have been very involved in the two-day event for BirdFest in Neah Bay.
- Everyone is invited to the Ocean Acidification workshop in Aberdeen on April 8 in conjunction with Brad Warren and the Global Ocean Health Program. Contact cdennehy@surfrider.org if interested.

Future Agenda Topics

- Jennifer Hagen is interested in a presentation by Jan Newton/ UW Ocean Acidification Center on the process of funding decisions for recommendations from the OA Blue Ribbon Panel.

The next OCNMS Advisory Council meeting will take place on **Friday, May 16** in Neah Bay, WA. Meeting was adjourned.